

Integrated Public Alert and Warning System

Wireless Emergency Alerts

In weather emergencies, warnings can save lives. **But traditional warning methods such as television, radio and outdoor sirens don't always reach everyone.**

Beginning in June 2012, emergency officials implemented a new way to send warnings directly to cell phones in affected areas — Wireless Emergency Alerts (WEAs).

These short messages may look like a text message, but unlike texts, which are sent directly to your phone number, these warnings will be broadcast to all phones within range of designated cell towers through the Commercial Mobile Alert System (CMAS).

The alerts will tell you the type of warning, the affected area, and the duration. You'll need to turn to other sources, such as television or your NOAA All-Hazards radio, to get more detailed information about what is happening and what actions you should take.



Illustration only. Actual message appearance will vary.

Is your phone ready for WEA?

If you have an older model phone, you will likely not receive Wireless Emergency Alerts. Some, such as newer-model iPhone and Android phones, will soon receive software updates that add this feature.

It is expected that all cell phones manufactured in the future will have WEA capability.

Check with your service provider to find out if your phone is WEA-capable. AT&T, Cricket, Sprint, T-Mobile and Verizon all have information about the new alert system and their compatible phones on their websites. Search for WEA (Wireless Emergency Alerts) or CMAS (Commercial Mobile Alert System) to find your provider's list of WEA-capable phones.

Key Things to Know:

- WEA messages may look like a text, or appear over your home screen.
- The alert message will include a unique ringtone and vibration.
- You will **never be charged** for WEA messages.
- Emergency alerts will not interrupt any calls or downloads in progress. If you're on the phone when the alert goes out, you'll get the message when you end your call.
- You need not have GPS or any other special features turned on to receive the alerts.
- **The system does not identify your location or phone number** – it simply sends the message to all devices in a given area.
- If you're on the road and enter an area with an active warning, you'll receive a WEA message as soon as you come within range of one of the affected cell towers.



Cell tower geography may lead to over-warning

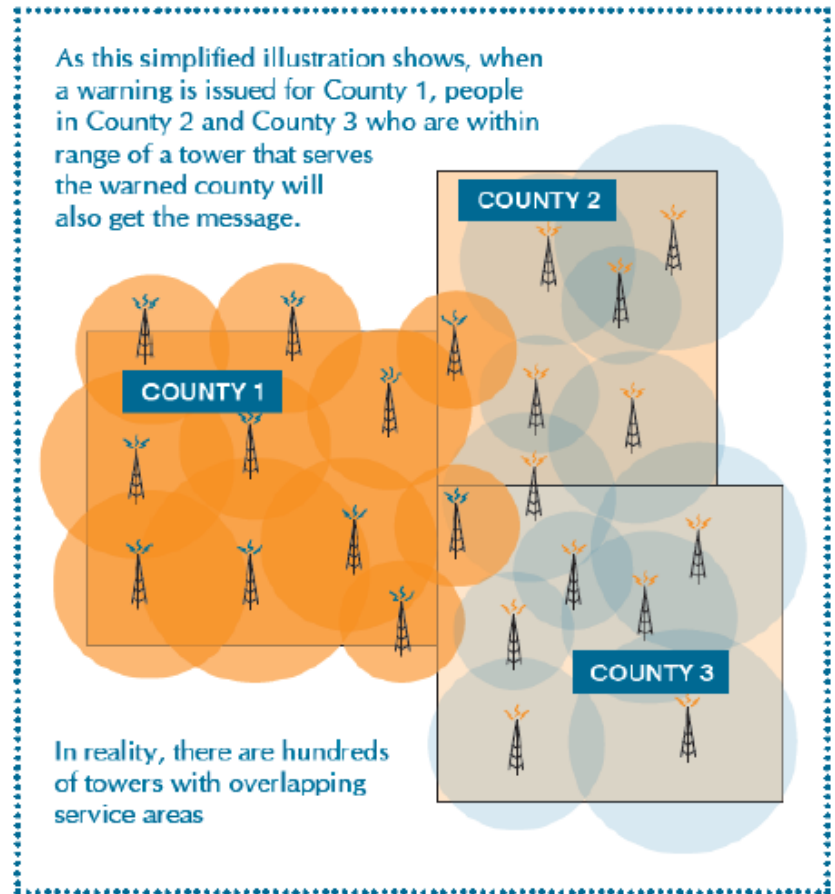
Because cell towers broadcast in a radius, or circle, their coverage areas don't line up neatly with county boundaries. This means you may receive warnings for an adjacent county if you're within a few miles of the border.

The alerts are delivered directly from cell tower to cell phone through a one-way broadcast. Unfortunately, in some cases, this may result in over-warning.

For example, if a tornado warning is issued for a particular county, it will go to all towers that serve that county.

Towers in urban areas generally serve a radius of two to five miles, and in rural areas up to 10 miles, so the warning message may reach a little beyond the warning boundaries.

Cell phone carriers are working to optimize the “targeting” of messages to avoid over-warning. The fix for this will vary depending on the various cell phone providers.



Wireless Emergency Alerts: Three Types of Warnings

The Commercial Mobile Alert System (CMAS) can be used to broadcast three types of emergency alerts:

- **PRESIDENTIAL ALERTS** — issued by the President of the United States in the event of a nationwide emergency.
- **IMMINENT THREAT ALERTS** — typically issued by the National Weather Service. **Tornado, Flash Flood, Ice Storm, and Blizzard Warnings** are some of the warnings that will initially be sent by the NWS in Lincoln, IL.
- **AMBER ALERTS** — issued by the **Illinois State Police (ISP)** to share information about a child abduction.

No president has ever yet had to issue a presidential alert, but should one become necessary, cell phone providers are required to broadcast it to all WEA-capable phones.

Cell phone users may choose to opt out of imminent threat and/or AMBER alerts, but the procedures vary by carrier. Some providers will allow customers to opt out of one or the other, while others only allow you to opt out of both. Contact your wireless provider for more information.

The National Weather Service **strongly encourages** all residents **not to opt out** of these potentially life-saving messages.

To learn more, contact your wireless service provider.

(Original document courtesy of the Kansas City Metropolitan Emergency Manager's Committee)

WEA Messages Originated by NWS

When new alert or correction issued or time/area extended

Warning Type	CMAS Message
Tsunami Warning	Tsunami danger on the coast. Go to high ground or move inland. Check local media. -NWS
Tornado Warning	Tornado Warning in this area til hh:mm tzT. Take shelter now. Check local media. -NWS
Extreme Wind Warning	Extreme Wind Warning this area til hh:mm tzT ddd. Take shelter. -NWS
Flash Flood Warning	Flash Flood Warning this area til hh:mm tzT. Avoid flooded areas. Check local media. -NWS
Hurricane Warning	Hurricane Warning this area til hh:mm tzT ddd. Check local media and authorities. -NWS
Typhoon Warning	Typhoon Warning this area til hh:mm tzT ddd. Check local media and authorities. -NWS
Blizzard Warning	Blizzard Warning this area til hh:mm tzT ddd. Prepare. Avoid Travel. Check media. -NWS
Ice Storm Warning	Ice Storm Warning this area til hh:mm tzT ddd. Prepare. Avoid Travel. Check media. -NWS
Dust Storm Warning	Dust Storm Warning in this area til hh:mm tzT ddd. Avoid travel. Check local media. -NWS

Legend

tzT = timezone

ddd= three letter abbreviation for day of the week

Useful Links

Weather Ready Nation WEA website including FAQ's

<http://www.nws.noaa.gov/com/weatherreadynation/wea.html>

Wireless consumer information

http://www.ctia.org/consumer_info/safety/index.cfm/AID/12082

Article on WEA

http://www.noaa.gov/features/03_protecting/wireless_emergency_alerts.html

10 minute video on CMAS/WEA

http://www.youtube.com/watch?v=OVhX_SbVxnY

More Questions ???

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